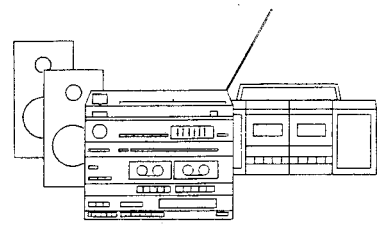
NOKIA
CONSUMER ELECTRONICS



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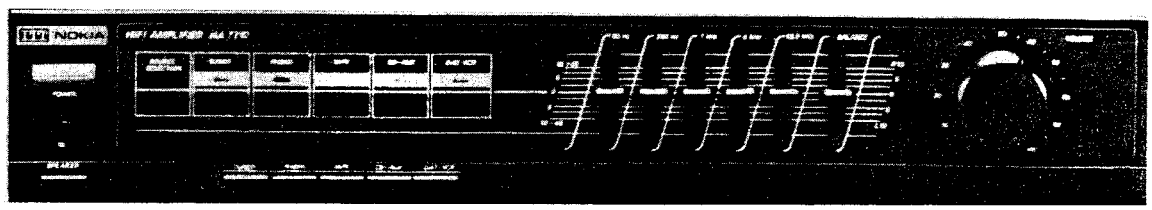
NOKIA Unterhaltungselektronik GmbH
Service, Östliche 132, Postfach 15 26
D-7530 Pforzheim

Service-Manual

ITT NOKIA HA 7710

Graetz HSA 6900



Sicherheitsbauteil!
Dieses Symbol kennzeichnet in den Schaltbildern alle Bauteile, die nur durch Originalteile ersetzt werden dürfen.

Bei Reparaturen gültige Sicherheitsvorschriften beachten!

Safety Component!
This symbol identifies in the circuit diagrams all safety critical parts. Replace only with specified part numbers.

Service and repair work to be performed only in accordance with existing safety regulations!

Composant de protection!
Ce symbol indique tous les composants dans les schémas,
qui doivent être remplacés uniquement par des pièces d'origines.

Pendant le dépannage respecter les régulations du sécurité!

Änderungen vorbehalten
Modifications reserved
Modifications réservées

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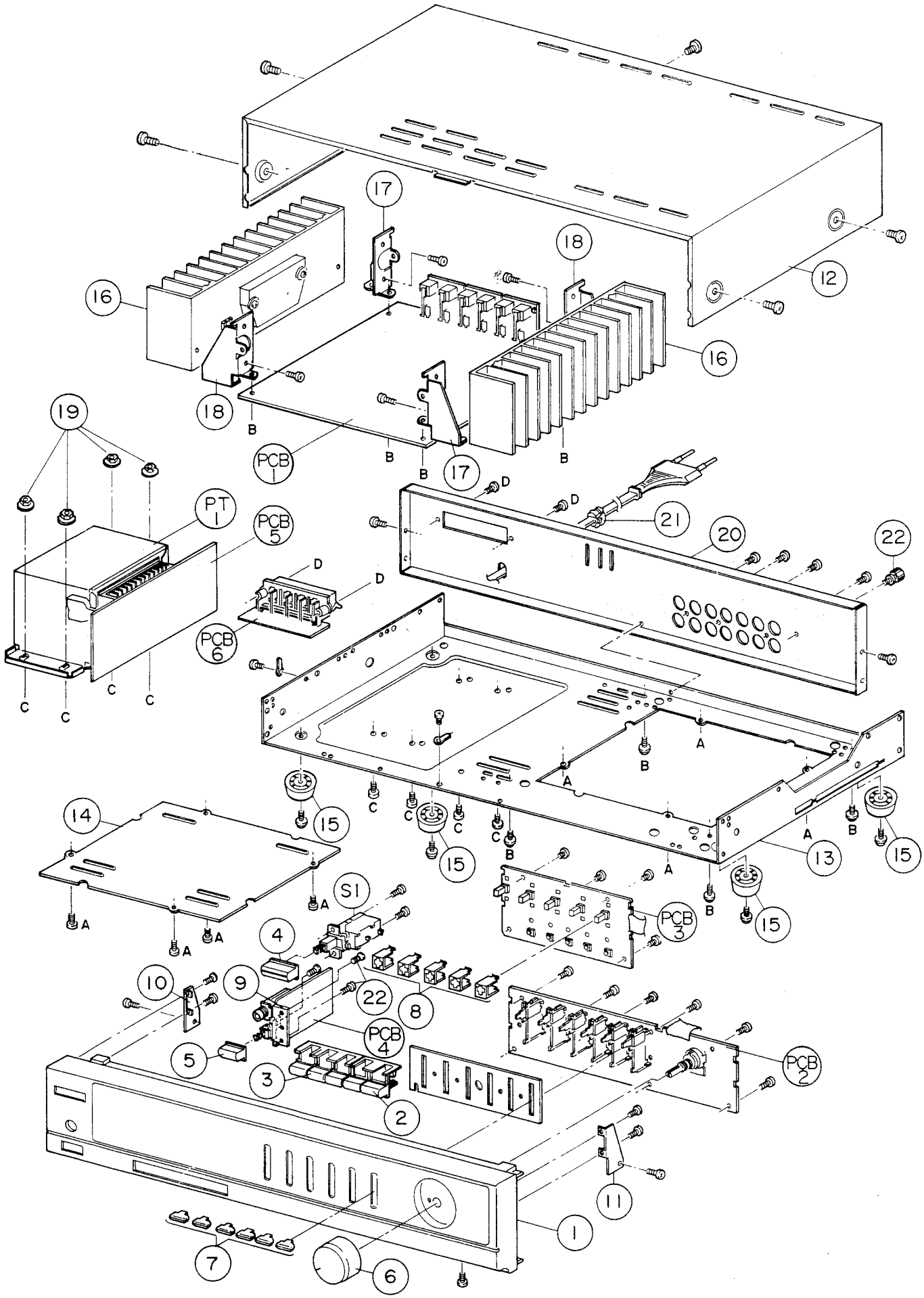
6611 79 66
(571 WE)


17
18
16
12
16
18
B
PCB 1
B
B
17
B
19
PT 1
PCB 5
D
D
PCB 6
C
C
C
C
D
D
21
20
22
A
B
A
C
C
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C
B
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A
15
15
15
13
14
A
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A
S1
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22
8
PCB 3
B
PCB 4
5
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2
PCB 2
11
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7
6

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.

HA 7710 / HSA 6900*

1	Gehäusefront Cabinet, front Boîtier, front	6418 36 85 6418 35 04*
2	Taste (FUNCTION) Pushbutton (FUNCTION) Bouton poussoire (FUNCTION)	6318 42 79
3	Taste (FUNCTION) Pushbutton (FUNCTION) Bouton poussoire (FUNCTION)	6318 42 80
4	Taste (POWER) Pushbutton (POWER) Bouton poussoire (POWER)	6318 42 71 6318 43 21*
5	Taste (SPEAKER) Pushbutton (SPEAKER) Bouton poussoire (SPEAKER)	6318 42 81
6	Knopf (VOLUME) Pushbutton (VOLUME) Bouton poussoire (VOLUME)	6328 07 11 6328 07 30*
7	Knopf (BALANCE) Pushbutton (BALANCE) Bouton poussoire (BALANCE)	6328 07 12 6328 07 31*
10	Halter Holder Support	8681 42 10
12	Gehäuseoberteil Cabinet upper part Boîtier partie dessous	6123 09 54
13	Gehäuseuntereil Cabinet bottom section Boîtier partie latérale	6123 09 55
14	Bodenblech Bottom panel Semelle	6123 09 56
20	Gehäuserückteil Cabinet back Boîtier arrière	6123 09 57 6123 09 62*
21	Durchführung Bushing Douille	8681 09 85
22	Schraube Screw Vis	7858 01 82
PT1	Netztrafo Mains transformer Transformateur secteur	4511 34 12
PCB1	Leiterplatte Printed circuit board Circuit imprimé	6913 20 67
PCB2	Leiterplatte Printed circuit board Circuit imprimé	6913 20 68
PCB3	Leiterplatte Printed circuit board Circuit imprimé	6913 20 69
PCB4	Leiterplatte Printed circuit board Circuit imprimé	6913 20 70
PCB5	Leiterplatte Printed circuit board Circuit imprimé	6913 20 71
PCB6	Leiterplatte Printed circuit board Circuit imprimé	6913 20 72

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.

HA 7710 / HSA 6900*

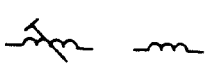
Bedienungsanleitung Operating instructions Mode d'emploi		6612 55 65 6612 55 79*
Netzkabel Mains cable Câble de réseau		4131 40 45
Sicherungshalter Fuse holder Porte-fusible		4157 01 41

IC 1	ICM 5218 L	3763 22 52
IC 2	IC LC 7818	3771 57 33
IC 101, 201	IC STK 4036 MK 2	3771 57 32
IC 102, 203	IC LA 3600	3771 49 13

Q 1	2 SD 1682-S	3614 44 01
Q 2	2 SB 1142-S	3614 43 99
Q 3	JA 101 R	3614 49 30
Q 4	JC 501 R	3614 49 29
Q 5,6,101,201	2 SC 5365 SP	3614 37 40

D 1,2,3,4	S 3 V 20	3657 13 47
D 5, 6	DSF 10 C	3656 29 96
D 7	GMA 01	3656 27 70
D 8, 9, 12	GZA 16 Z	3653 18 68
D 11	GZA 10 X	3656 28 38
D 12-16	LED SLP 183809	3681 17 13

VR 1	100 k	3118 90 96
VR 2	100 k	3118 90 98
VR 3, 4-7	250 K	3118 90 97



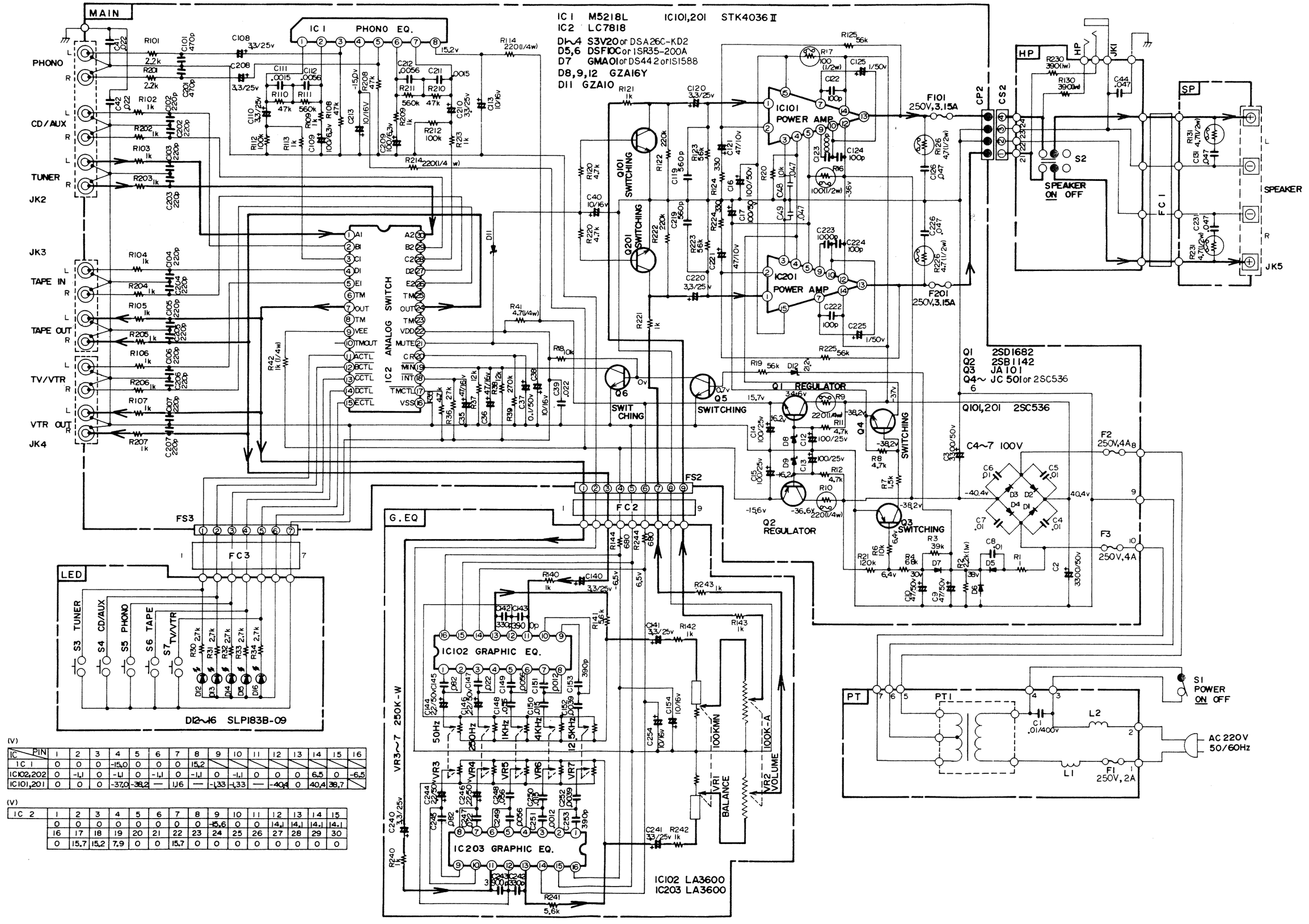
L 1, 2		4543 32 96

F 1	2 AT	4375 16 18
F 2, 3	4 AT	4375 10 45
F 101, 201	3,15 AT	4375 18 20

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.

S 1	Schalter POWER Switch POWER Commutateur POWER	4112 93 23 4112 93 23
S 2		4112 97 35
S 3-7		4112 95 26

JK 1		4144 82 32
JK 2		4144 82 30
JK 3, 4		4144 82 31
JK 5		4144 82 33



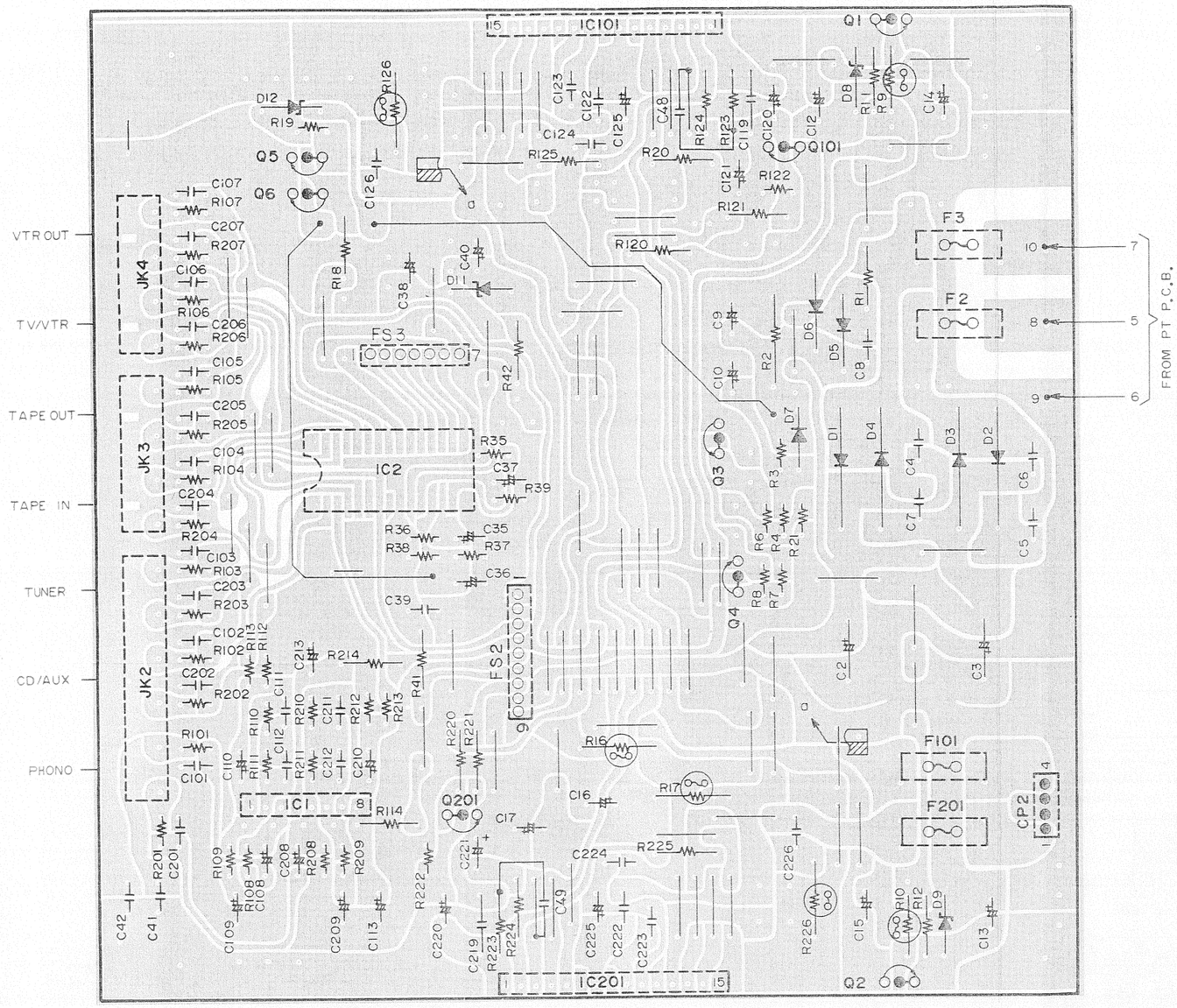
(V)

IC \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC 1	0	0	0	-15.0	0	0	0	15.2								
IC102,202	0	-1.1	0	-1.1	0	-1.1	0	-1.1	0	-1.1	0	0	0	6.5	0	-6.5
IC101,201	0	0	0	-37.0	-38.2	—	1.16	—	-1.33	-1.33	—	-40.4	0	40.4	38.7	

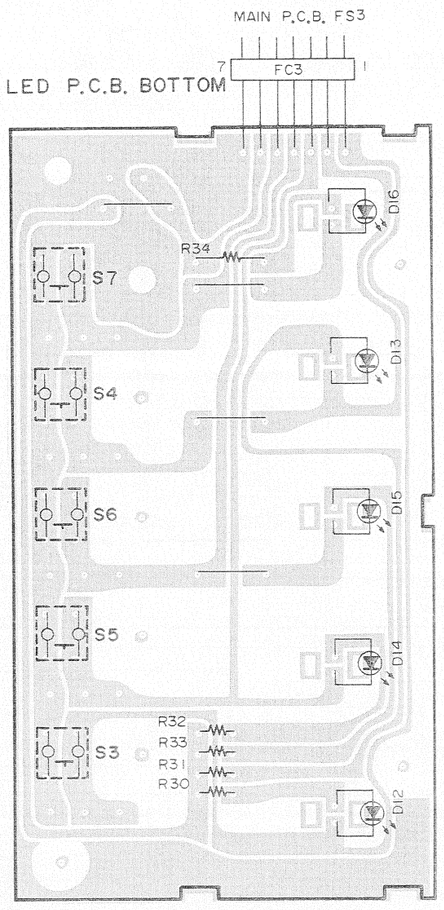
(V)

IC 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	0	0	0	0	0	0	0	0	-15.6	0	0	14.1	14.1	14.1	14.1
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	0	15.7	15.2	7.9	0	0	15.7	0	0	0	0	0	0	0	0

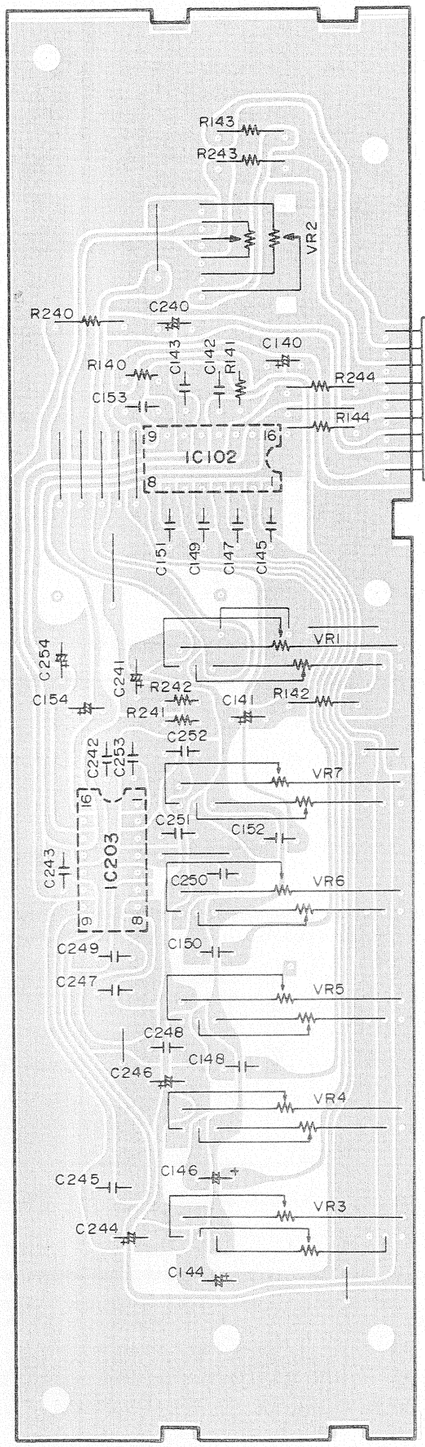
MAIN P.C.B. BOTTOM



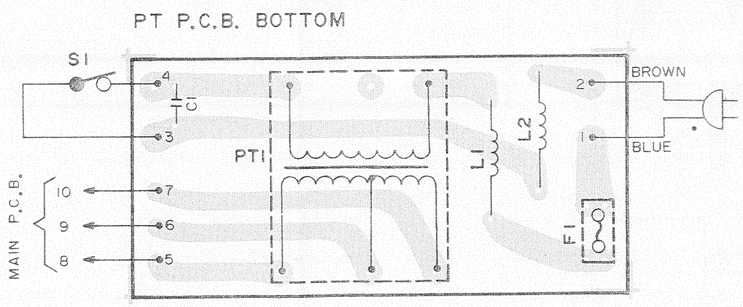
LED P.C.B. BOTTOM



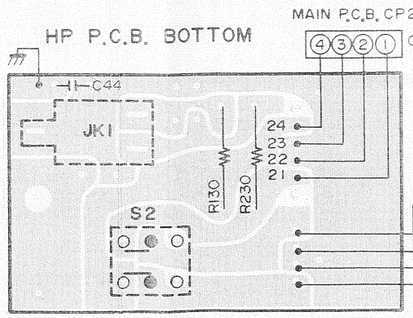
G.EQ P.C.B. BOTTOM



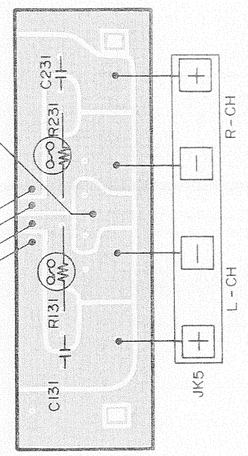
PT P.C.B. BOTTOM



HP P.C.B. BOTTOM

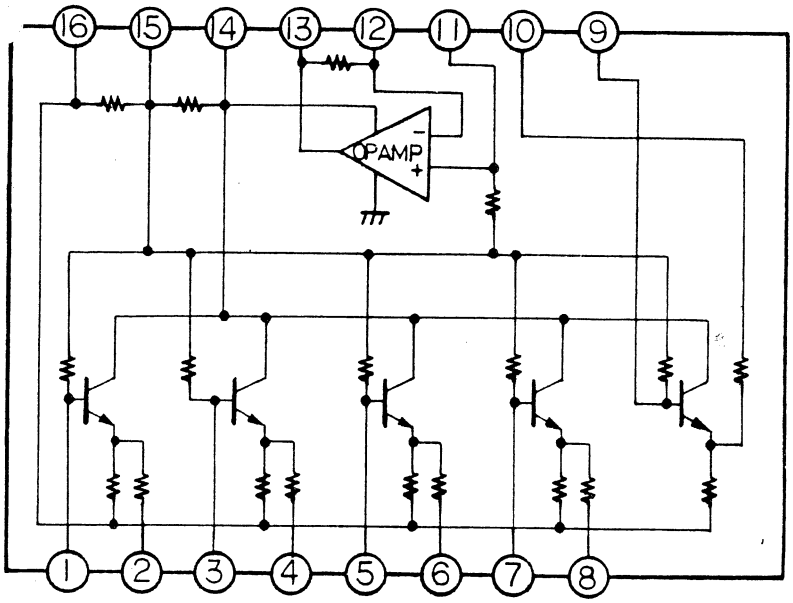


SP P.C.B. BOTTOM

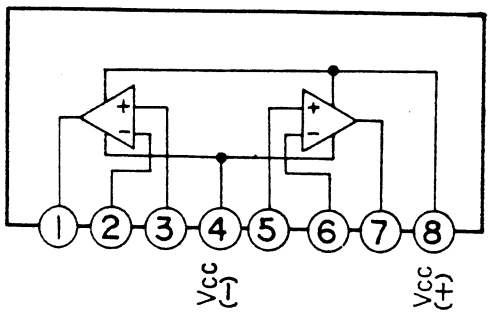


IC BLOCK DIAGRAM

LA3600



M5218L



LC7818